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EXAMINER
GARG, YOGESH C

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/634,435	Applicant(s) HU, SHIANN-JONG
	Examiner Yogesh C Garg	Art Unit 3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/05/2002 & Interview 08/08/2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☒ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. With reference to telephonic interview with the applicant's representative on 08/08/2002, examiner agreed to withdraw " Election by original presentation" and examine all the presented claims 19-38. Therefore, earlier Office action, paper number 13, is withdrawn and a new non-final office action is being presented.

Claim Objections

2. Claims 19 and 32 are objected to because of the following informalities: In lines 7 and 13 on page 2 and in lines 6 and 18 on page 5 the word "undue" is to be replaced by "undo". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 19-20, 22, 24-31, and 32-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Zeanah.

With regards to claims 19-20, 24-25, 28, 32 and 35, Zeanah teaches a system for developing a processing banking transactions system comprising a plurality of terminals for generating messages, wherein each message requests a banking transaction (col.5, line 41-col.6, line 10, ".. *The invention is described with reference to a system 10 for use by the bank....system 10 includes a delivery system 12 for providing financial services to a variety of remote devices....*", and col.6, line 58-col.7, line 8, "..*The touch point interface services set 40 provides an interface....includes a touch point interface component 41.....is responsible for managing the link/session level protocols with remote device...notifies the session services set 130 to start a new session on initial contact from a remote device.....also encodes messages in the interface protocol, sends messages to the touch point services set 50...*". Note: remote devices correspond to a plurality of terminals):

a business platform, stored on at least one computer, including:

a set of application transactions, wherein each application transaction can process a unique banking transaction (col.14, lines 43-54, ". *The transaction services set 90.... needed to accomplish particular business functions...Some examples .....are withdrawal component, deposit component, transfer component, transaction journal component, get payee list component, update payee list component, and make a payment component...*",) and can undo the unique banking transaction (col.15, lines 34-37, "..*The back door man component 101 switches between alternate or back-up external service providers to provide error recovery....*", col.19, lines 8-11, " *The session component 132 recovers resources when a session abnormally terminates and logs significant session events, such as start or end of session and session*

errors ", and col.23, lines 32-36, "..*To support various error conditions and easy switching ...the presentation manager component 52 preferable caches the last page output for each frame that it manages* ". Note: error recovery will help undo the transaction)

a main module for initiating an application transaction based on a banking transaction (FIG.2, and col.6, line 11-col.57, specially, lines 39-53, "..*The touch point and display set 30 provides the actual .....sends customer inputs to the delivery system 12...The touch point and display component 31 is responsible for managing the link/session level protocols with an application server on the remote device.....sends the customer input to the touch point interface set 40....*". Note: Delivery system 12-FIG.2- which includes plural sets of service components –touch point and display set 30,... 40, ... 50,.... 60,..... 70, ...80,.....session services set 130 relates to the main module in the application. Delivery system associates each transaction request with a banking application from an application server to service the request as disclosed in col.5, line 39-col.15, line 10, see specially col.5, lines 61-67, "..*The delivery system 12 provides financial services.....through an application server....*", and col.14, lines 43-54, *"..The transaction services set 90 handles ...transactions needed to accomplish particular business functions. The components within the transaction services set 90 provide transaction coordination.....message formatting.....*". Also refer to col.21, lines 10-42 and col.29, lines 43-51.);

a message formatter module for providing data on a banking transaction based on a message requesting the banking transaction (col.7, lines 24-60, "....*The presentation manager component 52 is responsible for mapping a canonical representation of information on pages into a specific style layout in a device specific presentation format.....The presentation manager component 52 also encodes the resulting page in the device specific format for the particular remote device.....converts..... from the device specific format to a tagged canonical*

representation, and routes the representation to the appropriate component within the dialog services set 80....". Note: Dialog services set 80 includes mini-app dialog component 83 which uses a transaction executor component 91 to carry out the transactions requested –col.13, lines 23-63".). Zeanah further discloses that the formatter [presentation manager component 52 in Zeanah corresponds to formatter] interfaces with a transaction definition table that defines the input fields for each banking application and stores converted data into a transaction field table (col.21, line 62-col.22, line 11, "..*The presentation manager component 52, using delivery vehicles specific named templates, is responsible for style and mapping to the encoding language of the target device* [transaction field table in application] .....*component 52 takes the app stream.....based on delivery vehicle specific templates, merges data based on mapping rules* [Rule component 121 in Zeanah –FIG 2 and col.26, line 32-col.28, line 38] *and produces the final token stream that is sent to the touch point and display component 31 ....*". Note: Final token stream in Zeanah corresponds to the converted data into a transaction field table);

a database interface module for providing a platform independent interface between the main module and at least one database (In Zeanah " Bank's internal computer system and bank's books" are banking databases. See col.1, lines 42-45, "..*Banks developed internal computer systems ...staff terminals.....bank tellers could access the books of the bank when they were entering, customer transactions.....*").

an external interface module for providing a platform independent interface between the main module and the terminals (col.4, lines 1-13, *"..In generating graphic interfaces, the system and method preferably separate content from format to accommodate variations in the remote devices....the system and method can provide state of the art user interfaces.....custom design a user interface*", col.6, line 58-col.7, line 60, "...*and The touch*

point interface services set 40 provides an interface.....includes a touch point interface component 41.....The presentation manager component 52 also encodes the resulting page in the device specific format for the particular remote device.....component 51 ". Note: devices corresponds to terminals);

a file interface module for providing a platform independent interface between the main module and a file system of the at least one computer (abstract, "..*The system and method provide state-of-the art interfaces with interface components and support legacy applications with legacy app bridge components* ", col.23, line 40-col.24, line 3, "..*A fundamental advantage of the delivery system 12 is the independence of one mini-app dialog component 83 from another.....The mini-app dialog component 83 also includes a rule file.....rule engine file....rule database file....language file....template file....*"

A set of knowledge blocks, wherein each knowledge block can perform a unique banking operation and can undo the unique banking operation and a set of system processing functions for providing a platform independent interface between the business platform and a server/each computer and further comprises a set of functions, wherein each common function can perform a unique business function, and wherein at least one banking operation includes at least one business function and an interface that allows user to add each of new application transaction and a new knowledge book (col.3, lines 51-67, "..... *Through the remote device, a customer or employee of a financial institution can select a mini-app dialog component to perform a function.....the mini-app dialog component collects information...and instantiates a transaction executor component to carry out the function.....*" . Note: In Zeanah mini-app components dialog relates to knowledge blocks for business rules. Also see col.23, line 40-col.24, line 3, " A *fundamental advantage of the delivery system 12 is the independence of one mini-app dialog component 83 from another.....a mini-app dialog component 83 may include an executable*

(.EXE) ....including the transaction executor component.....includes a rule engine file per rule...and a rule database file per rule that supplies any needed data to support mini-app specific rule authorities ", col.13, lines 13-63, col.14, line 42-col.15, line 10, *"....In some cases, more than one transaction executor component 91 may be associated with a give business function. Some examples of typical transaction executor components 91 are profile transaction component, scam transaction component, withdrawal component, deposit component, transfer component.....".* Note: element 91-TXN EXECUTOR-in FIG.2 refers to common function and abstract, "*..The system and method provide state-of-the art interfaces with interface components and support legacy applications with legacy app bridge components".* Also see col.23, line 46-col.24, line 3, " *IV. Mini-App Packaging.....The delivery system 12 can introduce a new mini-app dialog component 83 ..only on the introduced application.....The mini-app dialog components 83 are therefore preferably packaged as separate entities....component 83 also includes a rule file....a rule engine file.....supplies any needed data to support mini-app specific rules authorities...*", col.4, lines 35-44, "*..The rules within the system and method.....modified....business rules can be added..*",)nd col.17, line 41-col18, line 38))

With regards to claim 22, Zeannah further discloses accounting application servers, wherein each accounting application server processes an accounting entry, and wherein at least one application transaction generates at least one accounting entry (col.12, line 8, " *account component 115* ", col.17, lines 19-35, "*..The account component 115 supports query of account information and supports update of account information....". Also see col.5, line 64-col.6, line 10, "....or through an application server,....home services delivery system (HSDS),..disclosed in US Pat. No. 5,485,370....is hereby incorporated by reference....".*)

With regards to claims 26-27, and 33-34, functions of batch processing of banking transactions and reporting to other banks and consumers are inherent in banking. To support the inherency of these functions in banking please refer to US Patent 6,122,625 (col.34, lines 37-45, " *an Issuing Bank 1 may record the details of transactions being performed during the course of the day for later batch processing* ", and col.35, lines 23-33, "*..It is contemplated that all issuing banks 1 will provide a report reflecting their position at the end of a specified period...*") enclosed with this Office Action.

With regards to claims 29 and 36, Zeannah further discloses that each terminal is selected from a group consisting of: an automatic telling machine, a teller terminal, a point-of-sale terminal, a credit card machine, and a personal computer (col.3, lines 60-67, "*...The remote device may comprise any type of device, such as a personal computer, screen phone, ATM .....internal staff terminal.....system provides a single base for interfacing with all types of remote devices*". Note: a point-of-sale-terminal is covered under "all types of remote devices" in Zeannah.).

With regards to claim 30, Zeannah also discloses including a testing driver for simulating a terminal (col.9, lines 35-36, " *and a test-manager component 78* ", and col.11, lines 12-26)

With regards to claims 31 and 37, Zeannah also discloses that each business transaction is selected from a group consisting of " a current deposit, a fixed deposit, a withdrawal, a loan, a settlement, a credit card transaction, a debit card transaction, accounting, electronic remittance, and clearance (col.14, lines 43-54, ". *The transaction services set 90.... needed to accomplish particular business functions...Some examples .....are withdrawal*

component, deposit component, transfer component, transaction journal component, get payee list component, update payee list component, and make a payment component...", col.16, lines 5-13, "*..The customer ID component 111 has card information, if a card was used, including the type of card, such as ATM, credit card, Smart Card and tracks present ...data...deposit only flag.....links to account list..*", col.17, lines 19-35, "*..The account component 115 contains information and can answer any questions about a particular account.....The individual accounts may be customer owned or payee accounts that can be target of a transfer or bill payment..*", also col.2, lines 31-30-37. Note: As stated, this list of applications is an example and the applications like loan, settlement, and clearance would be inherent part of banking applications. Zeanah explicitly discloses that financial services are delivered to remote devices including ATM, PDA...(col.3, lines 51-67) and that would include electronic remittances).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 21, 23 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeanah, and further in view of Korth et al. (Text Book, " Database system concepts " McGraw-Hill, Inc., New York, Copyright © 1991, 1986).

With regards to claim 21, Zeanah teaches Zeanah teaches a system for developing a processing banking transactions system comprising a plurality of terminals for generating messages, wherein each message requests a banking transaction as disclosed in claim 19 and analyzed above. Zeanah further discloses the use of databases. In Zeanah " Bank's internal computer system and bank's books" are banking databases, see col.1, lines 42-45, "*..Banks developed internal computer systems ...staff terminals.....bank tellers could access the books of the bank when they were entering, customer transactions.....*". US Patent 5,485,370 is incorporated by reference in Zeanah, col.6, line 65-col.6, line 1. See Pat' 370, col.7, lines 20-34, and FIG.1,". *A plurality of .....financial service computer systems 20 (a-d)....are themselves ..host computers running database access systems* ".) One of Zeanah's objects of invention is that external platforms should be able to access the bank's databases through a common Interface-col.2, line 58-col.3, line 48, see specially col.3, lines 39-42, ".. ... *Thus a need exists for a computer system or method that has a .....offers access to various remote devices.....expansion of access to new types of devices..*". Zeanah further discloses the common interface to access banking databases (FIG.1-element 41, col.4, lines 28-34, *"..To coordinate communications.....a touch point interface component routes ....and an external service provider...*", and col.6, line 58-col.7, line 8). Zeanah further discloses the use of search engine in accessing the databases (col.12, lines 43-53, ".. *The navigation shell components 82 .....include a search engine of natural language searching capabilities..*").

Zeanah does not disclose a data dictionary that defines data requirements and a generator that can automatically generate a data layout based on the data dictionary, wherein the data layout is used by the business platform. However, elements like data dictionary and use of data dictionary to generate layouts for retrieving data from a database are common practices followed in database management systems.

Korth teaches a data dictionary that defines data requirements and a generator that can automatically generate a data layout based on the data dictionary; wherein the data layout is used for retrieving required data (at least see pages 1-12, 15, 17, 216 and 235-236. note: Korth has used Banks data base access systems as examples in the book). In view of Korth, it would have been obvious to a person of an ordinary skill in the art at the time of the invention, in Zeanah's Bank's computer systems, to use data dictionary in a database scheme and to generate automatically a data layout based on the data dictionary to be used by a business platform in Zeanah. Dong so would enable database management system in the " Bank's computer systems in Zeanah " to define a set of definitions for the database scheme and store this metadata about the structure of the database and authorization information in a tabular form to be consulted before reading or modifying actual data, as suggested by Korth (at least see page 12, under the head, " 1.6 Data Definition Language ", pages 15, 17, 216 and 235-236).

With regards to claim 23, Zeanah teaches Zeanah teaches a system for developing a processing banking transactions system comprising a plurality of terminals for generating messages, wherein each message requests a banking transaction as disclosed in claim 19 and analyzed above. Zeanah further discloses the use of databases. In Zeanah " Bank's internal computer system and bank's books" are banking databases, see col.1, lines 42-45, "..*Banks developed internal computer systems ...staff terminals.....bank tellers could access the books of the bank when they were entering, customer transactions.....*". US Patent 5,485,370 is incorporated by reference in Zeanah, col.6, line 65-col.6, line 1. See Pat' 370, col.7, lines 20-34, and FIG.1,". *A plurality of .....financial service computer systems 20 (a-d)....are themselves ..host computers running database access systems* ".) and as analyzed in claim 21.

Zeanah does not disclose a set of skeletons, wherein each skeleton includes common processing logic for implementing a desired function, and wherein the interface allows a user to modify each skeleton. However, elements like skeletons and skeleton tables and use of them were common practices in QBE data manipulation language and the database systems and is still being used by IBM's Query Management Facility (see Korth, page 121, " 4.2 Query-by-Example...4.2.1 Basic Structure.....Queries in QBE are expressed using skeleton tables.....).

Korth discloses a set of skeletons, wherein each skeleton includes common processing logic for implementing a desired function, and wherein the interface allows a user to modify each skeleton (at least see pages 121-134 under the head, " 4.2 Query-by-Example....4.2.1 Basic Structure....4.2.8 Modifying the Database...". Note: Korth has used Banks data base access systems as examples in the book). In view of Korth, it would have been obvious to a person of an ordinary skill in the art at the time of the invention, in Zeanah's Bank's computer systems, to use a set of skeletons, wherein each skeleton includes common processing logic for implementing a desired function, and wherein the interface allows a user to modify each skeleton. Dong so would help to avoid cluttering the display with all skeletons and instead use those skeletons needed for a given query and fill them, as suggested by Korth (at least see page 121, under the head, " 4.2.1 Basic Structure ").

With regards to claim 38, Zeanah discloses a method of developing a banking transaction processing system that includes a business platform for processing banking transactions, (col.5, line 41-col.6, line 10, ".. *The invention is described with reference to a system 10 for use by the bank....system 10 includes a delivery system 12 for providing financial services to a variety of remote devices....*", and col.6, line 58-col.7, line 8, "..*The touch point interface services set 40 provides an interface....includes a touch point interface component*

41.....is responsible for managing the link/session level protocols with remote device...notifies the session services set 130 to start a new session on initial contact from a remote device.....also encodes messages in the interface protocol, sends messages to the touch point services set 50...". Note: remote devices correspond to a plurality of terminals. Also see col.14, lines 43-54, ". *The transaction services set 90.... needed to accomplish particular business functions...Some examples .....are withdrawal component, deposit component, transfer component, transaction journal component, get payee list component, update payee list component, and make a payment component...*",). Zeanah further discloses the use of databases. In Zeanah " Bank's internal computer system and bank's books" are banking databases, see col.1, lines 42-45, "..*Banks developed internal computer systems ...staff terminals.....bank tellers could access the books of the bank when they were entering, customer transactions.....*". US Patent 5,485,370 is incorporated by reference in Zeanah, col.6, line 65-col.6, line 1. See Pat' 370, col.7, lines 20-34, and FIG.1,". *A plurality of .....financial service computer systems 20 (a-d)....are themselves ..host computers running database access systems* ".) and as analyzed in claim 21.

Zeanah further discloses automatically generating a database interface module based on the data layout, wherein the database interface module provides a platform independent interface between the business platform and at least one database, automatically generating a file interface module based on the set of file definition files, wherein the file interface module provides a platform independent interface between the business platform and a file system of a computer (col.7, lines 24-60, "....*The presentation manager component 52 is responsible for mapping a canonical representation of information on pages into a specific style layout in a device specific presentation format.....The presentation manager component 52 also encodes the resulting page in the device specific format for the particular remote device.....converts.....*

from the device specific format to a tagged canonical representation, and routes the representation to the appropriate component within the dialog services set 80....". Note: Dialog services set 80 includes mini-app dialog component 83 which uses a transaction executor component 91 to carry out the transactions requested –col.13, lines 23-63".). Zeanah further discloses that the formatter [presentation manager component 52 in Zeanah corresponds to formatter] interfaces with a transaction definition table that defines the input fields for each banking application and stores converted data into a transaction field table (col.21, line 62-col.22, line 11, "*..The presentation manager component 52, using delivery vehicles specific named templates, is responsible for style and mapping to the encoding language of the target device* [transaction field table in application] *.....component 52 takes the app stream.....based on delivery vehicle specific templates, merges data based on mapping rules* [Rule component 121 in Zeanah –FIG 2 and col.26, line 32-col.28, line 38] *and produces the final token stream that is sent to the touch point and display component 31 ....".* Note: Final token stream in Zeanah corresponds to the converted data into a transaction field table);

a database interface module for providing a platform independent interface between the main module and at least one database (In Zeanah " Bank's internal computer system and bank's books" are banking databases. See col.1, lines 42-45, "*..Banks developed internal computer systems ...staff terminals.....bank tellers could access the books of the bank when they were entering, customer transactions.....*".Also see col.4, lines 1-13, "*..In generating graphic interfaces, the system and method preferably separate content from format to accommodate variations in the remote devices....the system and method can provide state of the art user interfaces.....custom design a user interface*", col.6, line 58-col.7, line 60, "*...and The touch point interface services set 40 provides an interface.....includes a touch point interface component 41.....The presentation manager component 52 also encodes the*

resulting page in the device specific format for the particular remote device.....component 51 ". Note: devices corresponds to terminals);

a file interface module for providing a platform independent interface between the main module and a file system of the at least one computer (abstract, "..*The system and method provide state-of-the art interfaces with interface components and support legacy applications with legacy app bridge components* ", col.23, line 40-col.24, line 3, "..*A fundamental advantage of the delivery system 12 is the independence of one mini-app dialog component 83 from another.....The mini-app dialog component 83 also includes a rule file.....rule engine file....rule database file....language file....template file....*").

Zeanah does not disclose providing a data dictionary that defines a set of data requirements, automatically generating a data layout based on the data dictionary, wherein the business platform uses the data layout, providing a set of skeletons that define the business platform, wherein each skeleton includes common processing logic for a desired function of the skeleton and allowing a user to modify the set of skeletons, and providing a set of file definition files, wherein each file definition file defines a set of properties for a file.

However, as per knowledge generally available, the limitations of claim 38 not disclosed by Zeanah, as mentioned above, correspond to Database systems being used at large as per knowledge generally available.

Korth teaches providing a data dictionary that defines a set of data requirements, automatically generating a data layout based on the data dictionary, wherein the business platform uses the data layout (at least see pages 1-12, 15, 17, 216 and 235-236. note: Korth has used Banks data base access systems as examples in the book). In view of Korth, it would have been obvious to a person of an ordinary skill in the art at the time of the invention, in Zeanah's Bank's computer systems, to use data dictionary in a database scheme and to

generate automatically a data layout based on the data dictionary to be used by a business platform in Zeanah. Dong so would enable database management system in the " Bank's computer systems in Zeanah " to define a set of definitions for the database scheme and store this metadata about the structure of the database and authorization information in a tabular form to be consulted before reading or modifying actual data, as suggested by Korth (at least see page 12, under the head, " 1.6 Data Definition Language ", pages 15, 17, 216 and 235-236).,

Korth teaches providing a set of skeletons that define the business platform, wherein each skeleton includes common processing logic for a desired function of the skeleton and allowing a user to modify the set of skeletons (at least see pages 121-134 under the head, " 4.2 Query-by-Example....4.2.1 Basic Structure....4.2.8 Modifying the Database...". Note: Korth has used Banks data base access systems as examples in the book). In view of Korth, it would have been obvious to a person of an ordinary skill in the art at the time of the invention, in Zeanah's Bank's computer systems, to use a set of skeletons, wherein each skeleton includes common processing logic for implementing a desired function, and wherein the interface allows a user to modify each skeleton. Dong so would help to avoid cluttering the display with all skeletons and instead use those skeletons needed for a given query and fill them, as suggested by Korth (at least see page 121, under the head, " 4.2.1 Basic Structure ").

Korth teaches providing a set of file definition files, wherein each file definition file defines a set of properties for a file (at least see pages 215-240, chapter 7, heading, *" File and System Structure...7.1 Overall System Structure.....7.3 File Organization.....7.5 Sequential Files.....7.6 Mapping relational Data to Files....7.7 Data Dictionary Storage....7.9 Summary "*). Therefore, in view of Korth, it would have been obvious to a person of an ordinary skill in the art at the time of the invention, in Zeanah's Bank's computer systems, to include a set of file definition files, wherein each file definition file defines a set of properties for a file to be used by

a business platform in Zeanah. Dong so would improve the performance of database system in Zeanah's Bank's computer systems and make it more efficient, as suggested by Korth (at least see page 235, paragraph 2, " Nevertheless, a major factor....its performance.....depends on the efficiency of the data structures....and on how efficiently the system is able to operate these data structures.....").

Conclusion

7. The prior art made of record and considered pertinent to applicant's disclosure.

(i) US Patent 6,122,625 to Rosen teaches an electronic monetary system providing transactions for electronic money among bank, wherein the functions of the generator modules, the transaction modules, and the teller modules are performed by computer hardware and software (col.4, line 34-col.5, line 11). Further, Rosen supports the fact that functions of batch processing and reporting are inherent in banking system (col.34, lines 37-45 and col.36, lines 24-34).

(ii) US Patent 6,360,249 to Courts et al. discloses that the enterprise interaction hub includes a number of layers that interact to manage an enterprise web system. An interaction layer receives requests to the enterprise web system and returns responsive web pages. A presentation layer is coupled to the interaction layer and generates the responsive web pages. A business layer is coupled to the presentation layer and provides business logic for use by the presentation layer in generating the responsive web pages. An integration layer is coupled to the business layer and interfaces with existing legacy data to provide the legacy data to the business layer. A trend collection layer monitors and accumulates historical information from the interaction layer, the presentation layer, the business layer and the integration layer. The trend collection layer also stores the historical information in a trend database. A profile database, accessible by the presentation layer and the business layer,

stores profile data, including data mined from the trend database, that characterizes individual user access to the enterprise web system. The profile data is used by the presentation layer and the business layer to provide customized dynamic content in the generated web pages (col.2, line 57-col.2, line 11). In order to service requests the system and method takes help of the Power Builder engines (col.6, lines 38-57).

(iii) US Patent 6,018,627 to Iyengar et al. teaches a Tool-independent system for application building in an object oriented development environment with data stored in repository in OMG compliant UML representation (Title) with the help of third party tools such as Power Builder, Microsoft Visual Basic, etc. (col.12, lines 18-29)

(iv) US Patent 5,734,823 to Saigh et al. teaches an information distribution system and apparatus. In accordance with one form of the present invention, this system and method includes a central information bank and a central transactional database coupled to point-of-sale delivery systems. Information flows between each point-of-sale delivery system and the central information bank and central transactional database via a communication network such as the telephone network, a satellite network, or any other network suitable for the transfer of information. The point-of-sale delivery systems may take one of many forms including a point of purchase delivery system, a point of rental delivery system, a "book bank" subsystem, a promotional delivery system, or any combination of such systems.

(v) US Patent 5,287,501 to Lomet concerns database systems and particularly recovery mechanisms for multilevel systems. When a subtransaction (46) of a higher-level transaction (50) commits during the operation of a database (10), the database enters into its operation log a record (FIG. 6) that acts both as a commit record for the subtransaction (46) and as an update record for the higher-level transaction and includes a field (74) that identifies a higher-level "undo" transaction whereby the subtransaction can be undone without individually

undoing its constituent operations. By logging operations in this manner, the database can handle multi-level recovery with very few restrictions on the timing of its updates and log entries (at least see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh C Garg whose telephone number is 703-306-0252. The examiner can normally be reached on M-F (8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn W Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Yogesh C Garg
Examiner
Art Unit 3625

YCG
September 30, 2002

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